

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

1.(original): A method of processing an incoming data stream that contains a stream of encrypted data and a stream of messages, data in successive segments of the stream of encrypted data being decryptable with successive decryption information from the messages, the method comprising

    storing the stream of encrypted data;

    storing items with decryption information from the stream of messages;

    storing synchronization information linking respective points in the stored stream of encrypted data to respective ones of the items with decryption information, the synchronization being stored so that it is retrievable independent of the stream;

    replaying a stored part of the stream of encrypted data in an abnormal temporal pattern;

    retrieving the items with decryption information for the points in said stored part during said replaying;

    combining the retrieved items with decryption information with the stream during replay at times selected under control of the synchronization information, the items which are combined being selected and/or a time when the items are combined with the stream being selected, dependent on the synchronization information and the abnormal temporal pattern.

2.(original): A method according to claim 1, wherein the stream of messages contains a plurality of messages that repeat the same decryption information, the method comprising

    subsampling messages from said stream of messages, only items with decryption information from subsampled ones of the messages being stored, and

    the synchronization information linking groups of points in the stored stream of encrypted data to respective ones of the subsampled items.

3.(original): A method according to Claim 2, the method comprising

    detecting a transition after which the messages contain decryption information different from decryption information in messages before the transition;

    subsampling at least one of the subsampled messages at a predetermined position relative to the transition.

4.(original): A method according to Claim 1, wherein the method comprises

constructing a list of data pointers to selected parts of the stream of encrypted data, each data pointer being associated with a selected one of the items of decryption information that enables decryption of the encrypted data pointed at by the pointer;

determining, during replay, whether replay will access encrypted data in the part pointed at by a particular pointer in said list;

upon said determining using the list to supply decryption information from the item associated with the particular pointer.

5.(original): A method according to Claim 1, wherein the encrypted data contains image frames, and update information for deriving additional image frames by updating the image frames, the method comprising

constructing a list of data pointers to selected parts of the stream of encrypted data that contain image frames, each data pointer being associated with a selected one of the items of decryption information that enables decryption of the encrypted data pointed at by the pointer;

selecting, during replay, the parts of the stream pointed at by pointers in the list;

using the list to supply decryption information from the item associated with each pointer.

6.(original): A method according to Claim 1, the method comprising

decrypting the items of decryption information from the incoming data stream and re-encrypting the items of decryption information with a recording key prior to storage;

storing the reencrypted items of decryption information separately from the stream of encrypted data.

7.(new): An apparatus processing an incoming data stream that contains a stream of encrypted data and a stream of messages, data in successive segments of the stream of encrypted data being decryptable with successive decryption information from the messages, comprising:

a storage device;

a demultiplexer writing the stream of encrypted data to the storage device;

a decryption information recording unit writing items with decryption information from the stream of messages to the storage device, and further writing to the storage device

synchronization information linking respective points in the stored stream of encrypted data to respective ones of the items with decryption information; and

    a control unit replaying a stored part of the stream of encrypted data, wherein during said replaying a part of the encrypted data and corresponding items with decryption information are retrieved from the storage device according to the synchronization information.

8.(new): Then apparatus of claim 7, wherein the items of decryption information are written separately to the storage device to allow access separately from the encrypted data, and wherein during replay the decryption information is accessed separately from the encrypted data and combined during replay at times selected under control of the synchronization information, the items which are combined being selected and/or a time when the items are combined with the stream being selected, dependent on the synchronization information.